Appl. No. 10/751,333
Amdt. dated June 12, 2008
Reply to Office Action of March 19, 2008

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Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1.   (Previously Presented) A method for integrating run-time metrics into an integrated development environment (IDE), the IDE including a runtime environment and a user interface environment, the method comprising:

determining an application component to be monitored in the IDE, the application component having associated information in a component repository of the IDE runtime environment, wherein the component repository is configured to provide a list of components that are available to be invoked by the IDE runtime environment;

monitoring the application component in the IDE runtime environment to determine a plurality of metrics associated with the application component;

transmitting the plurality of metrics to a data collector of the IDE user interface; and

displaying the metrics to a user of the IDE.

2.   (Previously Presented) A method as recited by claim 1, the method further comprising:

providing, to the user of the IDE, an alert notifying the user of an error condition generated by the application component in production.

3.   (Previously Presented) A method as recited by claim 2, wherein providing an alert comprises displaying, for the user, a list of alerts generated since a last login by the user.

4.   (Previously Presented) A method as recited by claim 2, wherein providing an alert comprises sending an alphanumeric page to the user.

5. (Previously Presented) A method as recited by claim 1, the method further comprising:

 providing a policy manager in the IDE to allow the user to specify an operational concern for the application component;

 communicating the specified operational concern to a policy agent in the IDE runtime environment; and

 enforcing the operational concern with the policy agent during operation of the application component.

6. (Previously Presented) A method as recited by claim 5, wherein the operational concern is selected from the group consisting of a logging policy, an authentication policy, an encryption policy, and a caching policy.

7. (Previously Presented) A method as recited by claim 1, further comprising:

 allowing the user to create the application component in the IDE; and

 automatically registering the application component, when it has been created, with the component repository.

8. (Previously Presented) A method as recited by claim 7, wherein determining an application component to be monitored comprises:

 providing, from the component repository, a list of application components that can be invoked; and

 allowing the user of the IDE to specify an application component to be opened in the IDE runtime environment.

9. (Previously Presented) A computer program embodied on a computer readable medium, the computer program comprising a set of instructions which when executed by a computer, cause the computer to determine an application component to be monitored in the IDE, the application component having associated information in a component repository of the

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IDE runtime environment, wherein the component repository is configured to provide a list of components that are available to be invoked by the IDE runtime environment;

monitor the application component in the IDE runtime environment to determine a plurality of metrics associated with the application component;

-transmit the plurality of metrics to a data collector of the IDE user interface; and

display the metrics to a user of the IDE.

10. (Previously Presented) A computer system comprising a processor and a computer readable medium, the computer readable medium having stored thereon a computer program executable by the processor, the computer program comprising:

a component repository configured to maintain a list of available application components that can be invoked by an integrated development environment ("IDE") runtime environment;

an IDE runtime environment configured to open an application component and monitor operation of the application component to determine a plurality of metrics associated with the application component; and

an IDE user interface configured to allow a user to perform software development tasks, the IDE user interface comprising:

an instrumentor in communication with the IDE runtime environment, the instrumentor being configured to allow a user to control operation of the IDE runtime environment; and

a data collector in configuration with the IDE runtime environment, the data collector being configured to display at least some of the plurality of metrics associated with the application component.

11. (Previously Presented) A computer system as recited in claim 10, wherein the IDE runtime environment comprises the component repository.

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12.   (Previously Presented) A computer system as recited in claim 10, wherein the IDE user interface comprises a monitor, and wherein the monitor comprises the instrumentor and the data collector.

13.   (Previously Presented) A computer system as recited in claim 11, wherein the IDE user interface further comprises a policy manager configured to allow the user to specify an operational concern for the application component, and wherein the IDE runtime environment comprises a policy agent in communication with the policy manager, the policy agent being configured to receive the operational concern from the policy agent and enforce the operational concern during operation of the application component.

14.   (Previously Presented) A computer system as recited in claim 10, wherein the IDE runtime environment comprises:

a listener in communication with the instrumentor, the listener being configured to receive instructions from the instrumentor for controlling operation of the IDE runtime environment; and

a sender in communication with the data collector, the sender being configured to translate events generated by the operation of the application component into messages, and to send the messages to the data collector.

15.   (Previously Presented) A computer system as recited in claim 10, wherein the computer program comprises further instructions executable by the processor to:

allow the user to create an application component in the IDE user interface; and

automatically register the application component, when it has been created, with the component repository.

16.   (Previously Presented) A computer system as recited in claim 10, wherein the instrumentor is configured to allow a user to control operation of the IDE runtime environment by specifying a particular application component that should be monitored.

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17. (Previously Presented) A computer system as recited in claim 10, wherein the instrumentor is configured to allow a user to control operation of the IDE runtime environment by setting a context for the application component to be monitored.

18. (Previously Presented) A computer system as recited in claim 17, wherein the metrics displayed by the data collector are related to the context specified by the instrumentor.

19. (Previously Presented) A computer system as recited in claim 10, wherein the IDE runtime environment is configured to monitor application components in a production environment.

20. (Previously Presented) A computer system as recited in claim 19, wherein the component repository is configured to maintain a list of available application components that can be invoked either in the production environment or in a development environment.

21. (Previously Presented) A computer system as recited in claim 10, wherein the IDE user interface communicates with the IDE runtime environment using one or more protocols selected from the group consisting of the simple object access protocol ("SOAP"), the java message service, and remote method invocation.